

Effective Volume

There are only 390 minutes in a trading day. If a fund wants to accumulate/distribute a large position, the fund will usually send a large number of small orders that will adjust to the available market liquidity. However, since these orders will be in the same direction (buy or sell), it is possible to detect the intention of large funds simply by measuring the volume that is responsible for a price change from one minute to the next. Such volume is called the Effective Volume.

In a second step, the EV method separates the minute effective volume into large and small effective volume. The LEV is the EV that is higher than a separation volume and SEV is the volume that is lower than the separation volume. Think of a child's see-saw – the separation volume is the balance point of the see-saw of total volume between the LEV and SEV groups.

The LEV will often represent the foot-print of large funds' activity.

LEV /Price Divergences

1. When looking at LEV in several slides I notice that LEV can be negative for a period of time while price is going higher. Can you please explain how a stock can have negative LEV (which by default says a lower price occurred at the minute level), but have its stock price rise?

This is an important concept to understand because this is an example of a divergence, which can be an important signal of opportunity/risk.

There are several conditions that can cause a divergence between price and LEV. Two of the most important are:

- A. *Small Effective Volume (SEV) can, at least temporarily, mask the actions of larger players. Remember that although the actions of small investors are more dispersed, SEV is by definition potentially as strong at any point in time as LEV. However, SEV is made of a large pool of small investors who might have different views on the stock price direction, while LEV might have a concentrated/concerted opinion.*
- B. *The EV calculation of share accumulation/distribution applies more weight when the price trend has more consensus (a steady trend up or down) than when there is little consensus (high volatility both above and below the price trend). This concept is explained on page 24 of the book.*

Also note that the SEV/LEV analysis only shows an equilibrium and is therefore most useful when the stock price is not in a strong up/down trend. This analysis shows the most probable direction when the stock price hits a zone of support/resistance or when it is in a trading range.

2. I am looking for a backtest / any results that may exist for your divergences listing in stocks. I have downloaded the most recent version of DIVA.xls (from <http://www.effectivevolume.com>) and can start from there on a day-by-day basis if no such data exists. Specifically, I run my own analysis on a daily basis and would be looking to correlate the recommendations of my system to your +/- EV/price divergences.

From Pascal Willain: *"I already performed several back-tests that have been published in my book ("Value In Time"). I can tell you that using divergence between price and EV produces a return that is worse than a standard buy/hold benchmark. The reason for this is simple: LEV is not by itself an indication of strength. It is an indication of a change in equilibrium between large buyers and large sellers.*

This measure is only valid when the stock is at a key turning point, at the start or at the end of a trend, usually during a trading range, at a key support/resistance, or at a key Active Boundary level.

When the stock is in a strong uptrend, EV will often point down, which indicates a normal partial profit taking from large players (sell strength). The price trend is, however, much stronger than any EV trend.

However, if you measure EV at turning point and see that EV has been under accumulation while the stock price is stabilizing, then there is a good probability that the price will move up.

All this is explained in my book. There are copyright issues which forbid me to publish the book content on the EV web site. There is, however, some analysis/content duplicated with the publisher's authorization on the web site: www.willain.com

Since I wrote the VIT book, the markets have evolved with the advent of ETFs, HFT and POMO. This means that the move of a stock will be more influenced by the market direction and then by the sector direction than by its own buy/sell equilibrium.

*This is why I have recently focused much of my efforts to the market indicator (20DMF) and to the sectors indicator. You will see that the main **repository** includes a list of sectors and their respective levels. It also ranks the stocks with their rating. These ratings include the level of Billy's SIGR sector for the stock, the Active Boundaries level and the LER (Large Effective ratio) level. These signals have been back-tested and give a real edge, especially when you trade in the direction of the 20DMF.*

EV/Price "Divergence" is the least important of all the signals. It is the one that comes last. It will offer better returns only when the value-based indicators are also showing "attractive" value levels.

One of the best ways to use LEV is to buy a stock whose LEV pattern is up, while the stock price is pulling back to its trend line, if the general trend is up. This means that large players are still buying the pull-back and that the up-trend should resume (if the market does not fail outright).

3. I would like to ask you if in your opinion EV works for the principle of REVERSE DIVERGENCE that is valid in other strength indicators like RSI and derivative. Just to be clear to all:

In a bull market:

*a. STANDARD DIVERGENCE= Higher High in price with Lower high in indicator --
> Bearish*

b. REVERSE DIVERGENCE= Higher Low on price with Lower Low on indicator --> Bullish in bear market:

a. STANDARD DIVERGENCE= Lower Low in price with Higher Low in indicator --> Bullish

b. REVERSE DIVERGENCE= Lower High on price with Higher High on indicator --> Bearish

For example in a bear market, if buying volume (up sloping EV with an higher high on it) is not able to push price higher, does it mean that there is hidden passive selling in the upbar? May be Wyckoff principle that if effort doesn't produce results there are strong implications for a movement in the opposite side of effort.

It is very tempting to make that sort of interpretation, but do not forget that EV shows an equilibrium, not a force. Furthermore, the price trend could have many gaps, while EV does not show gaps, since EV measures the trading during the day.

I therefore use EV somewhat differently from this standard approach:

1. For single stocks

- In case of a price gap (due to news for example), I see if the news attracted buyers or sellers and especially after one or two days, the large players will indicate the general direction.

- You need to see EV in conjunction with a level of equilibrium (Support/resistance, 200MA, etc.). At such points, EV usually indicates the direction of the next move.

- Over a long period, when I see much accumulation or distribution, this gives me some clue on the direction of trading

- At a new low or at a new high, then large players might indicate a coming change (if EV makes a high or lower high/low)

2. For broad indices or markets

EV generally gives a view of the money direction. In such a case, standard divergence rules apply.